

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A ~~manufacturing~~ method of a smectic liquid crystal device comprising:

(a) inducing an isotropic phase-nematic phase-smectic phase sequence as a phase sequence of a mixture obtained by adding a photopolymerizable monomer liquid crystal exhibiting a nematic phase to a smectic liquid crystal exhibiting no nematic phase; and

(b) irradiating the mixture with UV rays so that the monomer is photopolymerized into a polymer to thereby form a smectic liquid crystal medium with a uniform orientation structure.

Claim 2 (Currently Amended): The ~~manufacturing~~ method of a smectic liquid crystal device according to claim 1,

wherein the polymer functions as a template that memorizes and stabilizes the orientation structure in (b), and

wherein a smectic liquid crystal medium with a uniform orientation structure which is completely the same as that before phase transformation, even if transformation into an isotropic phase after (b), is performed, is obtained directly from the isotropic phase.

Claim 3 (Currently Amended): A smectic liquid crystal device comprising an irradiated liquid crystal mixture manufactured by the ~~manufacturing~~ method according to claim 1.

Claim 4 (Currently Amended): The A smectic liquid crystal device comprising an irradiated liquid crystal mixture manufactured by the manufacturing method according to claim 2.

Claim 5 (New): The method according to Claim 1, wherein the amount of photopolymerizable monomer liquid crystal in said mixture is less than the amount of the smectic liquid crystal exhibiting no nematic phase.

Claim 6 (New): The method according to Claim 1, wherein the amount of photopolymerizable monomer liquid crystal in said mixture is 30% by weight or less than the amount of the smectic liquid crystal exhibiting no nematic phase.

Claim 7 (New): The method according to Claim 1, wherein the mixture consists of said photopolymerizable monomer liquid crystal and said smectic liquid crystal exhibiting no nematic phase.